



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

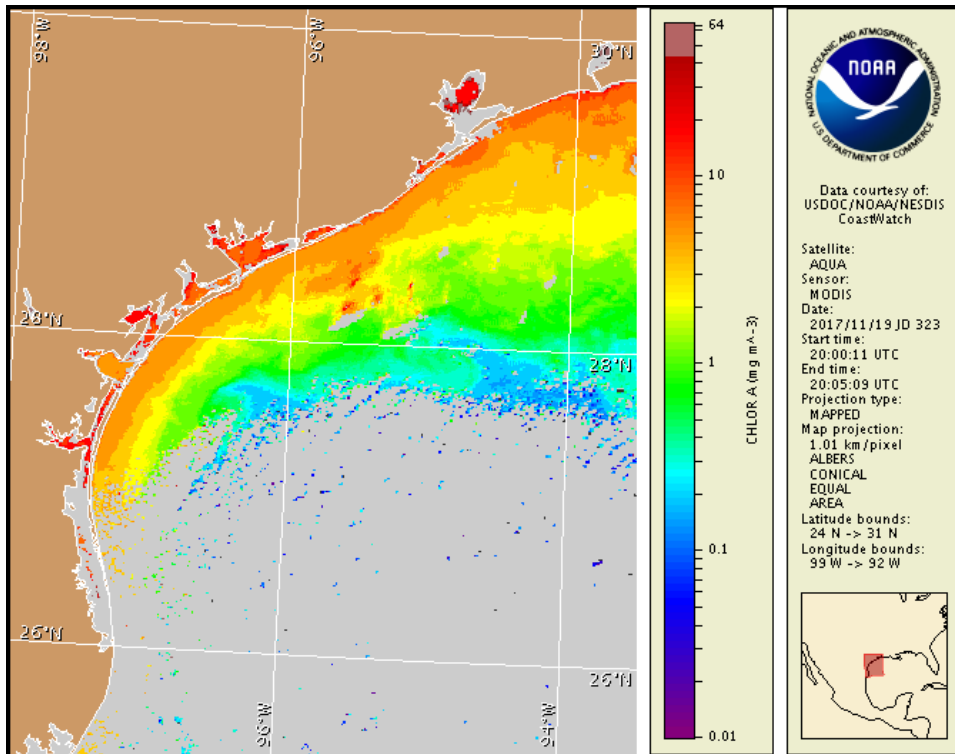
Monday, 20 November 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 13, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from November 10 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[https://tidesandcurrents.noaa.gov/hab/hab\\_publication/GOMX\\_HAB\\_Bulletin\\_Guide.pdf](https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_Bulletin_Guide.pdf)

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/enviroconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the Gulf of Mexico HAB:

<https://tidesandcurrents.noaa.gov/hab/gomx.html>

## Conditions Report

There is currently no indication of *Karenia brevis* (commonly known as Texas red tide) along the coast of Texas. No respiratory irritation is expected alongshore Texas Monday, November 20 through Monday, November 27. For local information, check the Texas Parks and Wildlife Department Red Tide page (<http://tpwd.texas.gov/landwater/water/enviroconcerns/hab/redtide/>).

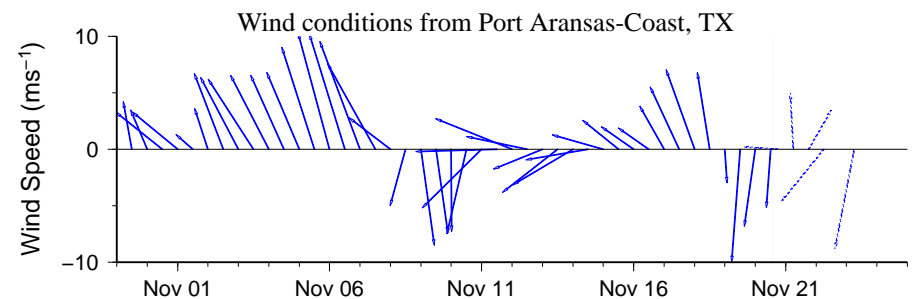
## Analysis

Data from Texas A&M University's Imaging FlowCytobot (IFCB), located on the Port Aransas ship channel, is currently unavailable. For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent ensemble imagery (MODIS Aqua, 11/19; shown left) is partially obscured by clouds from the northern Padre Island region to south of the Rio Grande, limiting analysis. Patches of elevated to high chlorophyll (4 to 16  $\mu\text{g/L}$ ) with the optical characteristics of *Karenia brevis* are visible 30km offshore the Matagorda Peninsula. However, elevated chlorophyll in this region is most likely due to the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 30km south from the Port Aransas region from November 19-23.

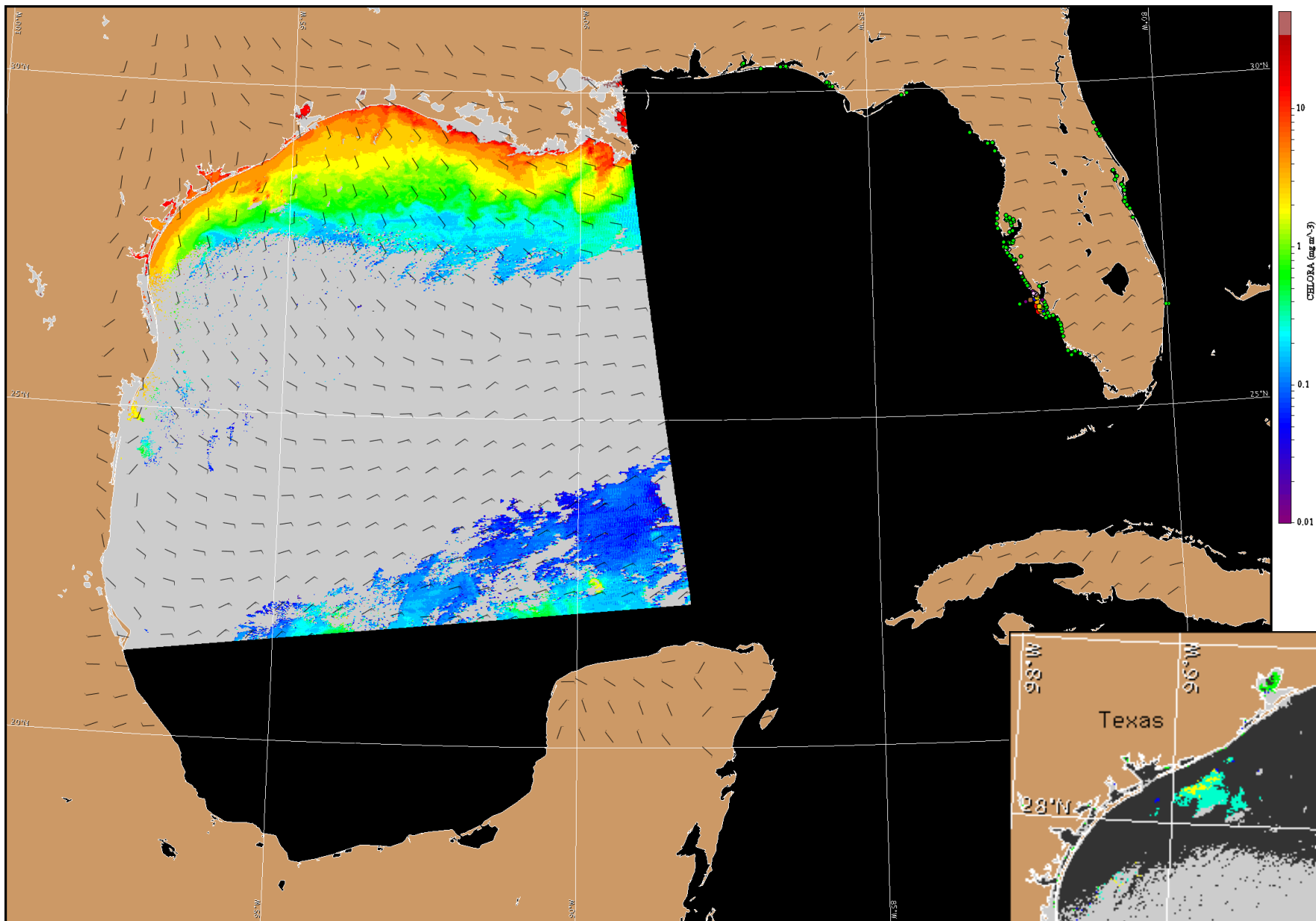
Yang, Davis



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

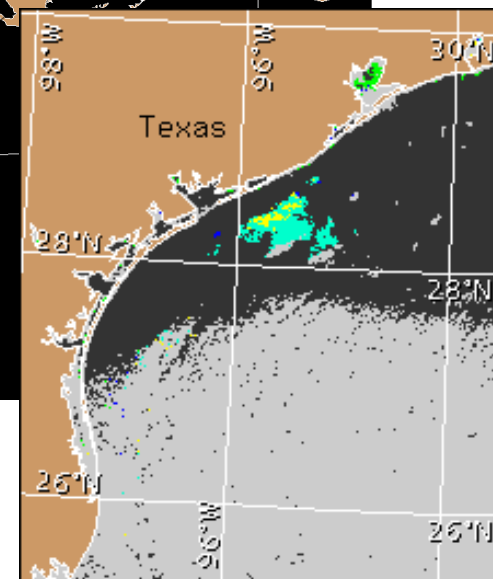
## Wind Analysis

**Port Aransas to Matagorda Ship Channel:** Variable winds (5-10kn, 3-5m/s) today and Tuesday becoming northeast and north (15-20kn, 8-10m/s) Wednesday. North winds (5-15kn, 3-8m/s) Thursday. West to southwest winds (5kn, 3m/s) Thursday night and Friday. South winds (10-15kn, 5-8m/s) Friday night.



Satellite chlorophyll image and forecast winds for November 21, 2017 06Z with points representing cell concentration sampling data from November 10 to 16: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).